

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>CM1882F/JH</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 98/ 15955</b>	International filing date (day/month/year) <b>31/07/1998</b>	(Earliest) Priority Date (day/month/year)
Applicant <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. ---

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/15955

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C11D3/37 C11D3/00 C11D1/62 C11D1/44

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 460 736 A (TRINH TOAN ET AL) 24 October 1995 see claims 1,12; example VII ---	1-3,7
X	WO 95 32272 A (PROCTER & GAMBLE) 30 November 1995 see claims 1,10; examples XI-B,C,E ---	1-3,7
X	GB 2 303 146 A (PROCTER & GAMBLE) 12 February 1997 see claims 1,3,6,9; examples 1F,2H,3L,4MN ---	1-3,7
X	WO 98 17758 A (HALL ROBIN GIBSON ;PROCTER & GAMBLE (US)) 30 April 1998 see page 1, paragraph 5; claims; example 5V --- -/--	1,2,7-11

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

11 March 1999

Date of mailing of the international search report

09/04/1999

Name and mailing address of the ISA

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Authorized officer

Loiselet-Taisne, S

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/15955

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DATABASE WPI Section Ch, Week 8750 Derwent Publications Ltd., London, GB; Class D25, AN 87-352690 XP002096170 &amp; JP 62 256899 A (MIYOSHI YUSHI KK) , 9 November 1987 see abstract</p> <p>-----</p>	10, 11

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/15955

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5460736	A	24-10-1995	AU 3216995 A	02-05-1996
			BR 9509285 A	18-11-1997
			CN 1168689 A	24-12-1997
			CZ 9701033 A	17-09-1997
			EP 0785977 A	30-07-1997
			JP 10506966 T	07-07-1998
			WO 9611248 A	18-04-1996
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WO 9532272	A	30-11-1995	AU 2387095 A	18-12-1995
			BR 9507691 A	23-09-1997
			CA 2189749 A	30-11-1995
			EP 0760846 A	12-03-1997
			JP 10500717 T	20-01-1998
			US 5565145 A	15-10-1996
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GB 2303146	A	12-02-1997	GB 2303141 A	12-02-1997
			CA 2226622 A	30-01-1997
			EP 0843715 A	27-05-1998
			WO 9703162 A	30-01-1997
			CA 2226620 A	30-01-1997
			CA 2226628 A	30-01-1997
			CA 2226629 A	30-01-1997
			EP 0862607 A	09-09-1998
			EP 0842247 A	20-05-1998
			EP 0856044 A	05-08-1998
			GB 2303143 A	12-02-1997
			GB 2303144 A	12-02-1997
			GB 2303145 A	12-02-1997
			GB 2303147 A	12-02-1997
			WO 9703158 A	30-01-1997
			WO 9703160 A	30-01-1997
			WO 9703163 A	30-01-1997
			WO 9703157 A	30-01-1997
			WO 9703155 A	30-01-1997
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WO 9817758	A	30-04-1998	GB 2318363 A	22-04-1998
			GB 2318362 A	22-04-1998
			GB 2323385 A	23-09-1998
			AU 4666897 A	15-05-1998
			AU 4805597 A	15-05-1998
			WO 9743367 A	20-11-1997
			WO 9817751 A	30-04-1998
			WO 9817752 A	30-04-1998
			WO 9817753 A	30-04-1998
			WO 9817777 A	30-04-1998
			WO 9817754 A	30-04-1998
			WO 9817755 A	30-04-1998
			WO 9817759 A	30-04-1998
			WO 9817766 A	30-04-1998
			WO 9817767 A	30-04-1998
			WO 9817768 A	30-04-1998
			WO 9817769 A	30-04-1998
			WO 9745513 A	04-12-1997
			WO 9817760 A	30-04-1998
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# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 29 DEC 2000  
WIPO PCT

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Applicant's or agent's file reference CM1882F/JH		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US98/1.5955	International filing date (day/month/year) 31/07/1998	Priority date (day/month/year) 31/07/1998	
International Patent Classification (IPC) or national classification and IPC C11D3/37			
<b>RECEIVED</b>			
Applicant THE PROCTER & GAMBLE COMPANY et al.		NOV 16 2001	

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
  - ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.


**RECEIVED**

NOV 23 2001

**TC 1700**

- This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  07/02/2000	Date of completion of this report  22.12.2000
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Renoth, H  Telephone No. +49 89 2399 8589



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US98/15955

## I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).):*

### Description, pages:

1-62 as originally filed

### Claims, No.:

1-11 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US98/15955

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	4-6
	No:	Claims	1-3, 7-11
Inventive step (IS)	Yes:	Claims	
	No:	Claims	4-6
Industrial applicability (IA)	Yes:	Claims	1-11
	No:	Claims	

### 2. Citations and explanations see separate sheet

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:  
see separate sheet

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
see separate sheet

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US98/15955

**ITEM V.:**

The following documents are mentioned in this report.

D1= US-A-5 460 736

D2= WO 95 32272 A

D3= GB-A-2 303 146

D4= WO 98 17758 A

D5= "The Condensed Encyclopedia of Surfactants" by M. and I. Ash, Edward Arnold ed., 1989, page 497: VARONIC U-250

A copy of D5 is annexed to this report.

*Novelty, Article 33(2) PCT*

Fabric care compositions comprising

- at least 1% of a polyamine-functional polymer or a nitrogen containing dye fixing agent and
- a water-soluble cationic surfactant or a polyalkoxylated alkyl amine surfactant capable of reducing or inhibiting scum formation

were already known from the prior art.

(see D1: example VII, claims 12 and 13, column 1, lines 20-45, column 6, lines 44-54, column 7, lines 24-52, column 9, lines 7-12, column 14, lines 29-64;

D2: examples XI B,C and E, claims, page 1, line 23 to page 2, line 4;

D3: examples 1 C,D,F 2 H, 3 K,L, 4 M,N, 5 Q,R,S, 8 Z, 9 AE,AI, claims;

D4: all examples, page 1, claims)

Therefore, the subject-matter of independent claim 1 appears to lack novelty (Article 33(2) PCT).

Moreover, the additional features of dependent claims 2, 3 and 7 to 9 are known from the above mentioned documents.

Thus, also these claims lack novelty.



Furthermore, the use of surfactants for reducing or inhibiting scum formation by means of water-soluble cationic surfactants or polyalkoxylated amine surfactants in compositions comprising a polyamine-functional polymer or a dye fixing agent was already explicitly or implicitly known from D1 (see column 14, lines 26-64, wherein VARONIC U-250, an alkoxylated tallow amine (see D5) and quaternary ammonium compounds are cited as scum dispersants and column 8, lines 19-28, wherein the water-soluble cationic surfactants are taught to be able to protect the diester softeners from interaction with anionic surfactants, thus inhibiting the formation of scum) and D4, page 1.

Therefore, the subject-matter of independent claim 10 and dependent claim 11 also lack novelty.

*Inventive step, Article 33(3) PCT*

Since it was already known from D1 to use alkoxylated fatty amines as scum dispersants, it was obvious for a skilled person to add this type of components to the compositions illustrated in D1.

Therefore, the subject-matter of dependent claims 4-6 cannot involve an inventive step.

**ITEM VII.:**

Independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (one of documents D1 or D4) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

Independent claims should therefore be redrafted accordingly. If, however, the applicant is of the opinion that the two-part form would be inappropriate, then reasons therefor should be provided.

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 to D4 is not mentioned in the description, nor are these documents identified therein.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US98/15955

On page 47, line 23 the description relates to the not published PCT/US97/01644.

Metric units should be used beside "gallon", "lb", "psia", "inches Hg", "cu.ft" on pages 51, 52, 54 and 55 (Rule 10.1(a) PCT).

Use claim 11 refers back to composition claim 9, which is not considered to be correct.

**ITEM VIII.:**

The scope of claim 1 should be clarified by specifying that the dye fixing agent is not a fabric softener or a polyamine-functional agent as specified in the passage bridging pages 17 and 18.

Claim 10 fails to indicate the type of surfactants necessary for carrying out the claimed use, i.e. which surfactant must be selected from the classes of claim 1 according to the present description. Therefore, claim 10 fails to indicate an essential feature of the invention. In this respect, it would appear that the invention cannot be carried out throughout the entire scope of this claim (Article 5 PCT).

The same objection applies to claim 11 insofar, as it relates to the use of water-insoluble cationic softeners. The present invention in fact relates to a combination with water-soluble cationic surfactants, water-insoluble cationic softeners being optionally components and not being indicated in the description as suitable for reducing scum formation.